Answer Key

# Significant Figures Practice Worksheet

*How many significant figures do the following numbers have?*

1) 1234 4

2) 0.023 2

3) 890 2

4) 91010 4

5) 9010.0 5

6) 1090.0010 8

7) 0.00120 3

8) $3.4 \times 10^4$ 2

9) $9.0 \times 10^{-3}$ 2

10) $9.010 \times 10^{-2}$ 4

11) 0.00030 2

12) 1020010 6

13) 780. 3

14) 1000 1

15) 918.010 6

16) 0.0001 1

17) 0.00390 3

18) 8120 3

19) $7.991 \times 10^{-10}$ 4

20) 72 2

## Significant Figures Worksheet

1. Indicate how many significant figures there are in each of the following measured values.

| | | | | | |
|---|---|---|---|---|---|
| 246.32 | 5 | 1.008 | 4 | 700000 | 1 |
| 107.854 | 6 | 0.00340 | 3 | 350.670 | 6 |
| 100.3 | 4 | 14.600 | 5 | 1.0000 | 5 |
| 0.678 | 3 | 0.0001 | 1 | 320001 | 6 |

2. Calculate the answers to the appropriate number of significant figures.

$$\begin{array}{r} 32.567 \\ 135.0 \\ +\ 1.4567 \\ \hline 169.0237 \end{array}$$

169.0

$$\begin{array}{r} 246.24 \\ 238.278 \\ +\ 98.3 \\ \hline 582.818 \end{array}$$

582.8

$$\begin{array}{r} 658.0 \\ 23.5478 \\ +\ 1345.29 \\ \hline 2026.8378 \end{array}$$

2026.8

3. Calculate the answers to the appropriate number of significant figures.

a) 23.7 x 3.8 = 90. or $9\bar{0}$

b) 45.76 x 0.25 = 1100

c) 81.04 x 0.010 = 0.81

d) 6.47 x 64.5 = 417

e) 43.678 x 64.1 = $2.80 \times 10^3$ or $2\bar{8}00$

f) 1.678 / 0.42 = 4.0

g) 28.367 / 3.74 = 7.58

h) 4278 / 1.006 = 4252